UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/646,830	11/09/2000	Yoshifumi Yanagawa	2000_1292A	1142

7590	12/17/2004		EXAMINER	

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ART UNIT	PAPER NUMBER
2611	

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-33_ is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-33_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a) ☐ All　b) ☐ Some * c) ☐ None of:

　　　1. ☐ Certified copies of the priority documents have been received.

　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

DETAILED ACTION

Abstract

1.   Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract <u>should be in narrative form and generally limited to a single paragraph</u> on a

separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed

150 words in length since the space provided for the abstract on the computer tape used by the

printer is limited. The form and legal phraseology often used in patent claims, such as "means"

and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist

readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the

title. It should avoid using phrases which can be implied, such as, "The disclosure concerns,"

"The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> *A person shall be entitled to a patent unless --*
> *(e) the invention was described in (1) an application for patent, published under section 122(b),*
> *by another filed in the United States before the invention by the applicant for patent or (2) a*
> *patent granted on an application for patent by another filed in the United States before the*
> *invention by the applicant for patent, except that an international application filed under the*
> *treaty defined in section 351(a) shall have the effects for purposes of this subsection of an*
> *application filed in the United States only if the international application designated the United*
> *States and was published under Article 21(2) of such treaty in the English language.*

3.   Claims 1-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Rostoker et al.

(U.S. Patent No. 5,872,784).

Regarding claim 1, (and in the scope of "target", "controller", and "initiator" as described in the present specifications), Rostoker discloses "a network control system for transmitting data between devices by using plural protocols, in a network in which at least two devices for handling at least one kind of data among video data, audio data, and information data, are connected through a transmission line", i.e., a host computer 302 as a first device controls network 301 via an apparatus 300 through transmission line either a telephone line or other transmission medium and a network apparatus 300 or a data server 310 as a second device for handling data including video, audio and information data (see col. 7/line 52 to col. 8/line 39), wherein:

each of the devices includes either or both of:

at least one controller which transmits a message, and at least one target which receives the message and performs processing according to the message, i.e., either the host computer or the network apparatus 300 has at least one controller for transmitting a message and a target or a receiving port for receiving the message (Fig. 3 shows details of the network apparatus 300 with data bus and CPU, see col. 9/line 32 to col. 10/line 43 & Fig. 16 and col. 23/line 59 to col. 26/line 65 for network protocols processing circuits);

said network control system comprises, at least, said controller, said target and an initiator for establishing a connection for data transmission between said controller and said target, i.e., an ATM processing unit as an initiator in establishing a connection for data transmission between the controller and the target or receiving port (Fig. 19 and col. 26/line 33 to col. 28/line 18 shows details of an ATM or APU 500 for this purpose in interfacing with the host);

said plural protocols comprise:

a first protocol which comprises message transmission for transmitting the message and

message response which is a response to the message transmission, and a second protocol for

data transmission onto the connection established by the initiator; and said target transmits data

onto the connection by the second protocol according to the message received by the first

protocol (Fig. 42, and col. 38/line 36 to col. 39/line 23 shows a clear view on multi-protocol

processing system for LAN and WAN networks for different protocols as ATM, Ethernet, FDDI,

Token Ring etc.).

Regarding claims 2 and 4, Rostoker discloses " a network control system for transmitting

data between devices by using plural protocols, in a network in which at least two devices for

handling at least one kind of data among video data, audio data and information data, are

connected through a transmission line wherein each of the devices includes either or both of; at

least one controller which transmits a message and at least one target which receives the message

and performs processing according to the message; said network control system comprises, at

least, said controller, said target, and an initiator for establishing a connection for data

transmission between said controller and said target; said plural protocols comprise; a first

protocol which comprises message transmission for transmitting the message and message

response which is a response to the message transmission, and a second protocol for data

transmission onto the connection; said initiator establishes, before data transmission a connection

of the second protocol between the controller and the target; when the controller receives the

data from the target, said controller makes a data request by the first protocol; said target

transmits the data onto the connection by the second protocol according to the data request; and

said controller receives the data by the second protocol" (same as in claim 1 above, with the

introduction of the data request made by the controller for the first protocol, and transmitting

data on the connection by the second protocol according to the data request, with the initiator

establishes the connection, this process is performed by Rostoker in processes of Figures 18B,

19, 20, 24, 25, 26 for the system controller checks the transmit request from the client and

response for an update and appropriate transmission protocols, and further details on network

protocol circuits from col. 23/line 59 to col. 29/line 40 for dynamic switching and intelligent

network interfacing methods of Rostoker).

Regarding claims 3 and 5, a network control system for transmitting data between

devices by using plural protocols, in a network in which at least two devices for handling at least

one kind of data among video data, audio data, and information data are connected through a

transmission, wherein: each of the devices includes either or both of; at least one target which

receives a message and performs processing according to the message and at least one controller

which transmits the message and establishes a connection for data said network control system

controller and said target; transmission with the target; comprises, at least, said plural protocols

comprise; a first protocol which comprises message transmission for transmitting the message

and message response which is a response to the message transmission, and a second protocol for

data transmission onto the connection; said controller establishes, before data transmission, a

connection of the second protocol to the target; when the controller receives the data from the

target, said controller makes a data request by the first protocol; said target transmits the data

onto the connection by the second protocol according to the data request; and said controller

receives the data by the second protocol" (same as in claim 1 above, with the introduction of the

data request made by the controller for the first protocol, and transmitting data on the connection

by the second protocol according to the data request, with the controller establishes the

connection, this process is performed by Rostoker in processes of Figures 18B, 19, 20, 24, 25, 26

for the system controller checks the transmit request from the client and response for an update

and appropriate transmission protocols, and further details on network protocol circuits from col.

23/line 59 to col. 29/line 40 for dynamic switching and intelligent network interfacing methods

of Rostoker).

As for claim 6, this claim for "a network control system for transmitting data between

devices by using plural protocols in a network in which at least two devices for handling at least

one kind of data among video data audio data: and information data, are connected through a

transmission line, wherein each of the devices comprises at least one of the following units; at

least one controller which receives and transmits a message, at least one target which performs

processing according to the message and includes at least one internal function control means, a

consumer which receives data from the target, and an initiator which establishes a connection for

data transmission between the target and the consumer; said network control system comprises,

at least, said controller, said target, said consumer: and said initiator; said plural protocols

comprise; a first protocol which comprises message transmission for transmitting the message

and message response which is a response to the message transmission and a second protocol for

data transmission onto the connection; and when said internal function control means performs

said data connection, a connection management means in the target connects the output of the

internal function control means to the connection of the second protocol, according to a request

of the internal function control means" with same limitations as addressed earlier with the

introduction of "a consumer which receives data from the target" is rejected for the reasons given

in the scope of claim 1, with the consumer can be any receiving device and/or at the client's

location (as illustrated in Rostoker, Fig. 1), and for the last limitation regarding internal function

control means and connection management means (see Rostoker, Fig. 42, and col. 38/line 36 to

col. 39/line 22).

As for claim 7, this claim is a combination of claim 5 and 6, and it is rejected for the

reasons given in the scope of claims 5 and 6 as discussed above.

As for claim 8, this claim is similar to claims 5-6 above with the introduction of "said

controller transmits an identifier indicating the destination in the consumer, to the target, using

the first protocol; and said target transmits the data including the identifier which indicates the

destination and is received by the first protocol, onto the connection, using the second protocol"

is also being disclosed by Rostoker by using packet IDs, headers, pointers, memory for storing

pointers and a Direct Memory Access (DMA) for fast addressing the correct destinations or ports

in the consumer, to the target, using multi protocol processing techniques including congestion

control technique (see Figs. 29, 30, 31, 32, 33, 42, and col. 25/line 22 to col. 26/line 65; and col.

27/line 35 to col. 28/line 59 for memory addressing and congestion control algorithms).

As for claim 9, this claim is similar to claims 5-6 above with the introduction of "said

controller transmits the message by the first protocol to a plug through which data is input and

output to/from a desired internal function control means; and said target executes the process

specified by the message directed to the plug" is also disclosed by Rostoker, i.e., the ports of

Rostoker can be regarded as the plug here for which data is input and output to/from a desired

internal function control means, and the receiving device or the target executes the process

specified by the message directed to the plug (Figs. 16, 29-33, and col. 31/line 35 to col. 34/line 52 for multi-ports and the multi-protocol processing as addressed above).

As for claim 10, in view of claim 9, Rostoker discloses "wherein said message includes a message for confirming the data transmission by the second protocol" (col. 2/lines 6-34 for acknowledgment messages in the routing and control procedures).

As for claim 11, in view of claim 9, Rostoker discloses "wherein the data transmitted by the second protocol includes version information, and the version of the data is managed by using the version information" (col. 2/lines 6-34 for information related to identities of source, destination, and protocols, and col. 4/lines 39-65 for version information as ATM protocol or MPEG protocol for received signals).

As for claim 12, in view of claim 9, Rostoker shows "wherein the data transmitted by the second protocol is information about a graphical user interface which forces the controller to make a notification to the user" (col. 7/lines 22-50 for software for enhancing visual on graphical user interfaces addressed).

As for claims 13-18, in view of claim 9, Rostoker further shows these claims for "wherein the data transmitted by the second protocol includes attribute information of the data"; "wherein the attribute information includes an identifier size information, and a data section"; "wherein the data transmitted by the second protocol is based on an object as a unit"; "wherein said object has the same structure as attribute information of the data transmitted by the second protocol"; "wherein said object has an identifier, size information and a data section"; "wherein said object has attribute information in the data section" (Figs. 18B, 19, 23A-D, 24, 25, 26, 28-33 & 42 for attributes and attribute information including identifiers as in Figs. 7-9 for packet

headers and other codes for streams either for transmission or reception, and size information as described in col. 16/line 40 to col. 18/line 53 for video and audio streams with identifiers as headers, data section and information).

Regarding claims 19-25, these claims with a controller for use within the cited network control system of claims 1-18 are rejected for the reasons given in the scope of claims 1-18 as discussed in details above.

Regarding claims 26-32 and 33, these claims with a target and a consumer for use within the cited network control system of claims 1-18 are rejected for the reasons given in the scope of claims 1-18 as discussed in details above.

Conclusion

4.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hales (US Patent 6,288,739 B1), Shaunfield (US Patent 5,867,484), and Rostoker et al (US Patent 5,668,809) disclose network control systems related to multi-protocol control.

5.   **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306, (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (703) 305-0095. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:30 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant, can be reached on (703) 305-4755.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

K. Kuanh

KRISTA BUI
PATENT EXAMINER

Krista Bui
Art Unit 2611
December 08, 2004